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A MILITARIE RUDIMENT,

OR

Observations of the form of Militarie exercise,
according to his Excellens Guard in Holland.

With the ranges and number of Officers in an
Armie, from the lowest to the highest, and
their dueties, in short.

As also is added a little anent the composition
of an Armie.

And finallie, Some few Principalls, in the
Art of Fortification.

By GEORGE INNES.



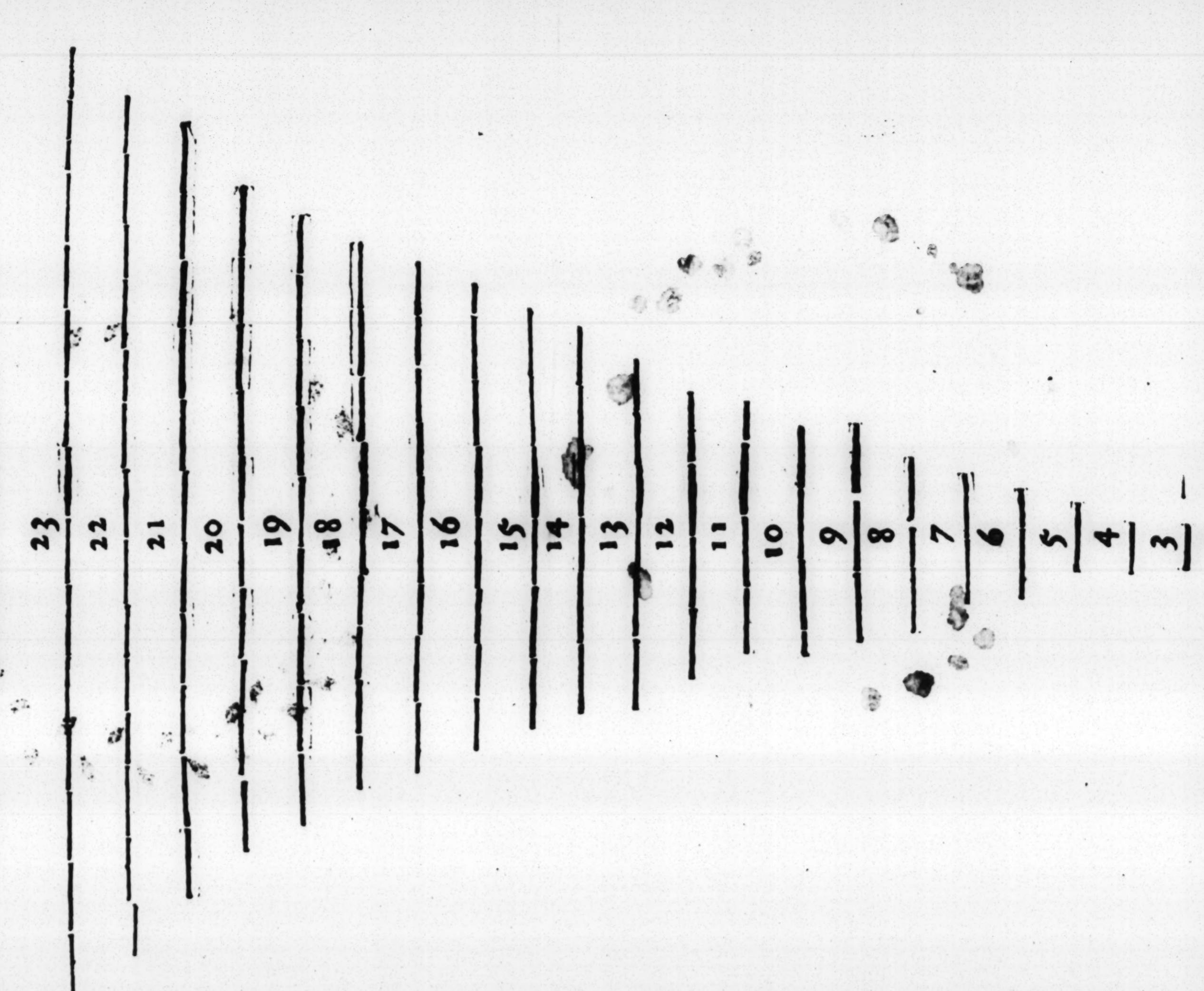
ABERDENE,
IMPRINTED BY EDWARD RABAN, 1644.

An. Emblem of the Steps

Of Military Preference.

HONOVR.

General.



This Conqueror-pyramidal ascended is by those,
Who fears not Death, who follows not reproach:
For Sloth and Ease can never scale so high,
And Cowardice makes Honour still to flee.

O, look above, The GARLAND is the Prize,
Which bold Bravus Knights to gain the same aiming.

2 Who would so moments, to gain the larger Branch;
Then bee must do's, by steps of lower Range:
1 The smaller Point, the greater beth drawes,
As of a Wedge, the Evidence who knowes.



To the thryce Noble and Illustrious
Lord, both in Vertue, and in Discent,
My LORD GORDON.

NY Lord, the exigencie of Tyme, with the request of some Friends & acquaintances, did first vrge to this attempt, for their private vse; which by accident you viewing, your will was, (which alwayes is to mee an absolute Commandement) I should publish the same: My boldnes now is in presenting it you. And because it doeth (as it were) theoreticallie peruestigiate the tresses of your Noble Practise abroad; where-by yee did treade the Path of Honour, sealed with a part of your Blood: Therefore, supplicateth your acceptance, and protection: for none more worthie to discern, none more able to defend, and to none myne affection tendeth so much in the offer of this my Myte: Vouchsafe it then my Lord, the Shield of your favour, where-by it shall bee able to march through an Armie of Aspersions; and I fortunate it shall bee vsefull to the inexpert. And thus, my Lord, you shall oblige all those to your beneficence, for granting it both advancement, and a pasport; & also fortifie my weakness, in what I zealouslie can approue my self,

MY LORD

Yours most affectionateli devoted servant,

GEORGE INNES.

THE
CIVIL
AND
MILITARY
EXERCISE
OF
A
SOLDIER
IN
TWO
BOOKS
WITH
A
BRIEF
INTRODUCTION
TO
THE
LOVING
READER.

To the Loving Reader.



Nothing is so well understood by Theorie, as by Practick: But of all studies Militarie Exercise is hardest, to conceave without Practise: Wherefore I haue done this Rudiment. Where first yee shall fynd the precept of the Practise it self: Secondlie, the instruction how to perform the Exercise: Thirddie, the use thereof: And fourthlie, the reason of the use, illustrated with divers Explanations, Notes, & Observations; not onlie for the sooner and better conception of the inexpert obeying Souldour; but also for the use of the inexperienced Commander: For tho when perfect in the Exercise it self; yet inconsiderable what Practise to choose, according to the oportunitie of tyme, the advantage of the place, the strength and manner of the enemies assault, it is not onlie in vayn, but damnable: For the Physician, though never so skilfull, in the nature and vertue of simples, and of their composition; yet ignorant in their application, it is not onlie to no effect; but that it provereth mortall. Thus I hope the impractised (for whose use it onlie is) will accept the same kyndlie, since I believe hee will fynd no easier conception hereof, in so short a Breviarie, for a Summe onlie I intend: I bid Fare-well.

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To the young Souldiour.



Oung Souldiours, come; heere make your
address;

And you shall fynd your Practise put in
Press.

**Practise, indeed, doth teach that's not our
own.**

But yet it is sooner, and better, known:
You to fore-know that which yee must practise,
For so the A& with Mynd doth sympathise.
Practise learns lay ; their own and others speach :
But Grammar Rules, the Reason doth vs teach.
Come frelie, come : For heere's a Theature;
Where The'rie assumes a Practick Nature.

Young Souldiours, then, this Rudiment imbrace;
Accept his payns, who doth such help express.

蒙古族传统节日

A Contraversie betwixt Theorie
and Practick, discerned by M. G. M.
in prayse of the Author, for
preventing Momus.

PRACTICK.

HEnce hence, these Rudimentall notious,
I am prayf'd, for braue practis'd motious.

THEORIE.

For all that, know, I do them paradise;
Teaching you how, when, and where, for to practise.

PRACTICK.

Tush spayr, a pine for your Direction:
Let you profess, I liue in Action.

THEORIE.

Ay, but that which yee say, I do profess:
It doth the lyne of acting well, express.

PRACTICK.

Can subtle words, with gallant acts compare;
Whyle Hunger, Cold, and Sword, I do out-dare.

THEORIE.

Words but reveal's in mee what is divyne;
Whyle your gross acts, are servants to the Mynd.

ПРАСТИСК.

What was Ulysses wit, when Ajax Arm,
Did quench the Greek Ships fyrie alarum?

THEORIE.

Then but remember, Ulysses gayn'd the Prysse;
Ajax for's fault, his lyf did sacrifice.

PRACTICK.

Thus then the Trophies of the Nobles Nyne,
Comes far too short, into these Rules of thyne.

THEORIE.

*NO; But note! What is the lyf of Glorie;
I am the Soull; thou but transitorie?*

PRACTICK.

In fenzi'd words yee do as much exceed,
As I in Valour alwayes you preceed.

THEORIE.

*If that the Instrument the Cause excell;
With lyke absurditie, yee press mee well.*

PRACTICK.

Are you the Cause, when Proves of an Act;
Reduc's your Chimera, in my sole Fact.

THEORIE.

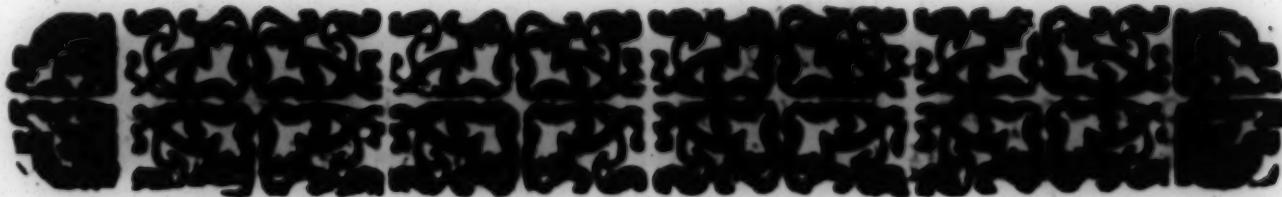
*If so, it holds your Sword to dignifie;
Abone that arm, yee so do magnifie.*

M. T. L.

HAlt both, I charge, and make a Reference,
Discerned in this sequell Inference.

This Author hee hath better Theoris'd,
That formerlie, hee hath the same practis'd.
And doubtless better now hee can practise,
That so well can his Practick Theorise.

Soull and Bodie makes a Man; beere it's rare,
Act and Thesis, Exactnes do declare.



THE
MILITARIE RUDIMENT,
OR OBSERVATIONS UPON MILITARIE EXERCISE.

A MILITARIE RUDIMENT, Or Observations vpon Militarie exercise.

Before I initiate the Exercise it self, or what is considerable there anent, I give the young Souldiorr this Frontispice of Preparation; wherein there is two generall Principalls, hee ought to bee acquaynted with: First, in the certayn Belief, that the Coward is as soon killed, as the Valiant man; and that manie more die in flight: as in fight; that Honour and Reward is to the one, but Shame and Punishment to the other. Secondlie, If this bee would shun, and that Gayr, it is in knowing how well hee can obey his Superiorr, For vpon Obedience all dependeth; and without the same, nothing can bee well ruled or done: for from Obedience, commeth Order; and from Order Militarie Exercise, (as yee may perceane by the Definition there-of) and by Militarie Exercise all is mayntayned.

DEFINITION.



MILITARIE EXERCISE, is a Uniformitie of Order, in respect of difference of persons; in respect of Distinction of Tyme; and in respect of distance of place.

And for the first of those, in respect of persons, what Commandement is to one, must bee practised by all; except accidentallie, and in trayning.

And in respect of Tyme, what is practised bee one, all must practise at the self same instant, saving onlie in the former exception.

And in respect of Place: It is to bee considered, there are three sorts of Distances; to wit, Open Order: Secondlie, Order: thurdlie, Closse Order.

Open

Open Order, or the first Distance is, when the Souldiours both in rank and String, stand six foot remov'd one from another.

The vse hereof, is for exercising your motions: in which case, yee must always keep your Open Order: and the reason is, the larger the Exercise, the greater Distance is required.

The second distance, or order, is, when the Souldiours stand three foot remov'd one from another.

The vse thereof, is for the Musquetiers, who must never bee closser: and the reason is, they must haue a free vse of their Arms.

The third distance, or Closs Order, is commanded by this word CLOSE: which is when there is a foot and half from string to string, and three from rank to rank.

The vse hereof, is for the Pikes onlie, and never must bee vsed, but when yee stand firm to receave the Enemie: and the reason is, the closser they stand, they are the more vni-ted: and so vneasier to bee broken.

Having considered the foresayds: and before wee come to the Exercise it self; there is four things to bee performed: the first is, to place the Companie in the first Distance of Open Order: and that for the reason in it own place beforesayd.

The second is consisting in this word of COMMANDEMENT: to wit, SILENCE.

The vse thereof, is, that all may give audience, and obser-vance, to that onlie which is commanded.

And the third, is to make known to them all, what a Rank and a String is; and the best Definition I can giue you is.

To wit, of a Rank, when yee consider it from the right to the left hand, onlie one man in depthnes.

And of a String, when yee recken and consider it from the Front to the Rear, onlie one man in broadnes.

The third thing is consisting in two Commandements: to wit,

Stand right in your { Ranks.
 } Strings.

The Instruction how to perform both these Precepts is when

their own just and equall distance is betwixt man & man, both in Rank and String; but when they are in their third order, their distance then must bee equall, but *respective*.

And the reason is, if standing not right in rank and string, they should bee promiscuous; and there-vpon confusion, so contrarie to order; for the verie essence and subsistence of Militarie Exercise, is Order.

The vse of these Precepts, is in that they are the foundation of the whole Exercise; For what Exercise can bee performed without a rank and string, except simples; which may bee done by one onlie person, without a bodie.

And now of the Exercise it self, whose composition is of motion, and they are of two sorts. The first are the Motions of the Exercise it self; which without Arms may bee done.

The second are the Motions of the Postures, in handling of the Arms; And for the first of these, they are lykewayes of two sorts.

The first of these are Primitiue, or more Simple Motions; The second are Derivitiue, or Motions, of an ampler practise; and justlie the particular exercises, are called Motions.

And of these primitiue, and more simple Motions; which are in number eyght; Four distinguished, and four indistinct; as yee may perceave by the words of Command; to wit,

To the right hand.

As yee were.

To the left hand.

As yee were.

To the right hand about.

As yee were.

To the left hand about.

As yee were.

The Instruction how to perform the distinguished four is; When to what hand yee turn, the foot of the self same hand or syde, by mooving, indeed, turns; but the contrarie foot onlie removeth. As for Example; If yee turn to the right hand, the foot of the right syde

must mooving turn; But the heell of the foresyde foot, must keep the same place, & the contrarie foot onlie remoue. And the reason is, to keep a perfect equall distance by all.

And the Lesson in performing the other four is to bee speciallie noted, when yee are commanded as yee were, yee are to

return by the contrarie hand. As for example; If yee turn to the right hand, yee are to return as yee were to the left hand, but the self same foot which did not remoue in the turning, must not remoue in returning; and that for the reason, in the preceeding instruction.

The vse of these Motiones is, in that they are the fundamental Means, where by yee may frame a Companie consequentlie a greater bodie, to anie fashion or figure that is exigent.

But in the mean tyme, of placing your Companie, this generall observation, must not bee forgotten; that in the Front, Middle, and Rear; the most expert and capable bee placed; for they are Leaders; whom the rest must follow in performing the subsequent Motiones; where-vpon this generall precept is to bee published; to wit,

Follow your leaders, and keep with your right hand man.

The vse hereof is for facillitating their practise; for it is a precept to each other rank, to each other string; as also to the followers of middle-men, and followers of bringers vp; and the reason is, That is to them onlie this Rule, they are most inexpert; For rudeness, and inexperience, requyret not onlie precept, but example; and this for performing the following Motiones, which are of the second sort, and of an ampler practice; and they are in number manie. The first of them are

Double your ranks to the right hand.

As yee were.

Double your ranks to the left hand.

As yee were.

Doubling of ranks is done, when each other rank from the Front, man by man interponeth themselves severallie in the former rank, in the distance betwixt string & string, to what hand they are commanded.

Double your strings to the right hand.

As yee were.

Double your strings to the left hand.

As yee were.

Doubling of strings is done, when each other string from what hand yee double, man by man interponeth themselves severallie

verallie betwixt man and man, in the distance betwixt rank and rank, to what yee are commanded.

Middle-men, double your Front, to the right hand.
As yee were.

Middle-men, double your Front, to the left hand.
As yee were.

This is done, when the sixt rank equallic marcheth vp to the Front; and their placeth themselves betwixt man and man, in the first rank, to what hand they are commanded; and so the seaventh, to the second; the eyght, to the third; the nynth, to the fourth; the tenth rank, to the fyft; and this is they beeing ten in deepnes.

Bringers vp double your Front, to the right hand.
As yee were.

Bringers vp double your Front, to the left hand.
As yee were.

This is done, when the last rank; to wit, the tenth, equallic marcheth vp to the Front; and therein the first rank placeth themselves betwixt man and man; and so the penult to the second. The ante-penult, to the third; the seaventh, to the fourth; the eyght, to the fyft. So that both their doublings of middle-men and bringers vp, maketh but half the deepnes; but in the self same broadnes, vrasth themselves in confederacie by double the former number.

The vse of all these doublings in generall, is, When vpon a sudden surpryse yee double your strength, in presenting; but this holdeth not alwayes, in doubling of strings; For then they are all open; and it is for evation, eyther of small or great shot: but if the assault bee vpon the wings, and the commanded to the right or left hand; the first vse then holdeth. They are often practised within a Wall, a Hedge, or Advantage, with other vseth, which brevicie will not permit.

Rank to the { right } hand counter-march.
{ left }

This is a Counter-march in deepnes; to wit, From the Front to the Rear. But if yee wold make a Counter-march in broadnes.

ness: that is to say; From the right hand to the left hand string,
yee must command them first

Strings, to the

} right hand. Then
right hand Counter-march.
} left hand. Then
left hand Counter-march.

The Instruction here-in is all one, when yee Counter-march. The first Ranks, or Leaders, onlie must advance, and step forwards, with the right or left leg: if to the right hand, the right leg: if to the left hand, the left leg: and then turn, and so beeing fallen down, to the Rear, rank your self, accordinglie in the Rear. And all the other ranks must march vp to the same place from whence the first ranks did counter-march before they turned: And so they march to the Rear, by the right or left hand, (as is commanded) of that part of their own string that followeth them. And these that haue counter-marched, must still follow them that as yet advanceth to the place of their Counter-march. So that everie man regayneth the same place, hee first was in. And thus you see, it is contrarie to the ordinarie March, as the word it self beareth.

The vse of a Counter-march commonlie is, when you Skirmish; For you fight then looss, and disbanded; and doeth not advance towards the Enemie.

Make your Conversion, to the right or left hand inwardlie.
As you were.

This is done, whē the two outmost strings; to wit, the right or left hand string onlie turneth, the right hand string, to the left hand; and the left hand string, to the right hand; Which maketh the two strings, to bee face to face. Then the strings in the bodie within these two outmost; The one half of them falleth to the right hand string; and the other half, to the left hand string. And so they are all in two strings, face to face. And thus they are so much voyd betwixt, as the strings within the outmost took vp.

And the vse heereof, is not onlie to giue way, but to make Guard, to the Generall, to an Ambassador to go in or out at a

Passage; or to those that hath rendred a Fort, to go out.

Make your conversion to the right or left hand outwardlie.

This is done, when the two middle strings turneth; to wit, The right hand string, to the right hand; the left hand string, to the left hand: and so back to back, then the strings on the right hand of the middle strings, falleth in to the right hand string, and the strings on the left hand, falleth into the left hand; and so maketh of all but two strings, and that back to back. There is conversions also, when all the strings remayn inteir and compleet; but by equall division, the one half turning to the left hand, and the other half to the right hand; and so all faces to faces; or by turning outwardlie, the one and other half; and then back to back.

The former two Conversions can not bee vsed, but when they are four or six at most in broadness; to wit, in strings; but the latter Conversion may bee vsed, when they are a great manie strings.

And the vse of that outward Conversion amongst others, is, when they are hardlie assaulted on both wings.

The first rank string consequentlie the rest.

This is performed, when the right hand man in the Front advanceth whyle the bodie halteth a little; and then his left hand man followeth vp after him; and so all the rank man by man, is drawn vp to the string; and after this maner all the remayning strings. And thus as they haue stringed, one after another falleth vp to his first order.

The string on the right or left hand, consequentlie the rest.

This is done, when the right or left hand string advanceth from the bodie, whyle the same halteth to the tyme the last man of the foresayd string bee clearlie advanced from his collaterrall string; Then immediateli the remayning strings in lyke manner advanceth one string after another; commonlie as the first string is clearlie advanced; it then halteth to the tyme the following string, falleth vp to his first order; and so one after another.

The vse of both Exercises (except in some little respects) are all

are all one they are done, when yee come to port, a strait, a Passage; When one onlie is able to march in front.

Before yee make the Great Turn, or wheeling about yee must perform these particulars following, fyue in number.

Right about.

Close your ranks.

Close your strings, to the right and left hand.

Close your ranks, to the sword point.

Mount your Arms, Pickes and musquets.

The Great Turn, to the { right
left } hand.

There is so manie distinct Particulars in this Exercise severallie performed, that it admitteth no further Instruction, onlie note when yee will haue them close their strings, to the right or left hand, the outmost string on that hand yee purpose to close, must bee commanded to stand, and all the rest to close to it.

And before you command them to their first Order, you must cause them performing these four ensuing particulars: to wit;

Open your ranks, to the Rear.

Ranks to your Order.

Strings to your Order.

Front as you were.

In opening ranks or strings, you must make all, both ranks and strings, (saving the outmost on that hand yee mean to open which must stand) to moue altogether, to the tyme the second rank, or string, from that which standeth, haue gotten it distance and subseuent the rest.

The vse hereof, is altogether defensive, to keep them selues vnbroken by the furie of horses.

And now this much of these Exercises, common to both Pike-men and Musquetiers; But there are others vsually onlie bee the Musquetiers; and these are such as followeth. But before yee practise these particular Motions; your men must bee set in Batell, ten deep; or vpon exigencie in Skirmishing; And when your Armie is not great, yee may place them six in deepleness; And

ness; And then yee must not fayll to command them, to obserue that in all their actiones, they turn to the right hand; and that they carrie the mouches of their pieces high, as well when they are panning, as when they are pan-guarded; and come to giue fyre. And the termes vsuall are.

Make readie the first two Ranks.

Turn to the right hand, and giue fyre.

And the Instruction of thus giving fyre is that alwayes two ranks make readie together, and advance ten paces forwards before the bodie. At which instance, a Sergeant, or when the bodie is greater some other Officer, must stand; to whom the Musquetiers are to come vp before they present, and giue fyre. And the second rank keep their Musquets closs, to their Rests: And the pan-guarded; and as soon as the first are fallen away; the second immediateli presenteth, and giue fyre; two more are to make readie. And so one after another; making the advancement of ten paces still; by which yee mayntayn at least your own ground; if otherwayes yee loss ground. And the reason is, they being ten in deepnes. The Rear men be consequence ten paces behynd. Which ten they advancing, they stand in the self same place of these that were first in the Front.

The vse hereof is in there is the ordinarie form in Battell: and when they do not Skirmish; but rather advanceth towards the Enemie.

Make readie the first two ranks, in the Rear.

Turn to the right hand, and giue fyre; and fall vp to the Front; And so to the last.

This is done, when you command the whole bodie right about. And thus your Front, the Rear; & the Rear, your Front. And then maketh that which is Rear, now giue fyre by commanding them right about; and after fyre, to fall away; and place themselues in the Front. And so one after another.

The vse is, When you are charged in the Rear; And whyle you thus giue fyre, you march forwards to your intended place, whether it bee for Relief of that place; or for your own safetie; or for advantage in preoccupying the Enemie in a Pass; or when you haue

you haue charged the Enemie, and there-after intendeth to make a safe Retreat; Because you haue the wors, or other *respective*.

Left about.

Note; That this a Commandement to all the Companie.

The string on the right hand, make readie, and giue fyre, to the right hand; and stand firm.

The other two strings, march vp.

The second and third, turn to the right hand; and giue fyre.

All three thus beeing in on Front; the Sergeant bringeth vp the first to the second, vpon the right hand; Then leadeth vp the strings, to the Front of the left string.

Here-in you may see and perceave so manie distinct particulars, that the instruction in performing this practise is clear.

And the vse for the most is when with a few you would occapi the length of a lyne, of a Wall, or of a Ditch, or anie other suitable Advantage. And thus giue fyre vpon the Enemie, as hee passeth.

All the forsayds, which is vsuall onlie by the Musquetiers, are most observable in exercising; and that for teaching and trayning the vnlearned. But in practise, you must vse onlie these Commandements.

Make readie by ranks; present, and giue fyre; and stand firm; and fall about to the right hand, to the Rear; or rather,

Make readie.

Present.

Giue fyre.

Note; As the Capteyn exerciseth the Musquetiers particullarie; So the Lieutenant exerciseth the pike-men; making a Charge with Touck of Drum, in presenting their Arms to the right and left hand; in the Van-guard, and in the Rear, marching and retising, answering to the Touck of Drum; which vpon service done.

March and Trouncing; a Charge; and a Retreat.

E

And

And thus much of the foresyd Motions, wherein a young Souldiour may bee trayned; and in some measure, before hee haue the occasion of Arms. But now of the Motiones of your Postures, in handling your Arms. To wit, Of Pike and Musquet. And first of the Postures of the Pike, of whose number some are performed standing; which you shall discern by this letter S. And some are exercised both standing and marching; which you shall distinguish by these letters S. and M. For in the position heere I keep onlie the Method, according to the Order of the Exercise it self in trayning.

Lift your pikes.	S.
Mount your pikes.	S.
Set down your pikes.	S.
Shoulder your pikes.	S. and M.'
Charge your pikes.	S. and M.
Set down your pikes.	S.
Palm to the point your pikes.	S.
Cheek your pikes.	S. VVhich is done, when by palming, you hold your right hand vpon your syde, with your pike; and your left hand vpon the point thereof.
Recover your pikes.	S. Which
Charge your pikes.	S. and M.
Shoulder your pikes.	S. and M.
To the right or left hand charge.	S. and M.
Shoulder your pikes.	S. and M.
Charge to the Rear.	S. and M.
Port your pikes.	S. and M.
Stand.	
Set down your pikes.	S.

Obserue in charging that half the ranks onlie must charge their pikes; And that they carrie them so couched over the heads of the formost, as may give no offence, eyther in charging or retiring. And the reason is, In that this way, pikes are not so subject to bee broken by the shot of the Enemie.

Next; Of the Postures of the Musquet; And the words of Command vsuall in the handling therof. And these first your Musquet beeing charged,

March

March with your Musquet in your hand.
 Sink your rest, and vnshoulder your Musquet.
 Hold vp your Musquet in the right hand; and
 let her sink in the rest.

In your left hand, hold your Musquet; & car-
 ric your rest with it.

In your right hand, take your Lunt, (or
 Match) and hold it well.

Blow your Lunt.

Cock your Lunt.

Try your Lunt.

Blow your Lunt; and try your pan.

Hold your Musquet, and present.

Giue fyre.

Now, Having discharged your Musquet, you must charge
 agayn, after the manner following.

Take down your Musquet, and carrie your
 Rest with it.

Uncock your Lunt.

Blow your Lunt.

Put it agayn betwixt your finger.

Blow your pan.

Morss your pan.

Cloze your pan.

Cast off your pan.

Cast about your Musquet.

Trayll your Rest.

Open your Charges.

Charge your Musquets.

Draw out your Ramsticks.

Shorten your Ramsticks.

Fetch your Musquet forward, with the left
 hand; and hold it vp in the right
 hand; and recover the Rest.

Shoulder your Musquet.

And having thus way charged your Musquet, you must agayn
 make readie, as followeth.

Lay your

Lay your Musquet in your Rest.
 Hold your Musquet in your Rest, with the
 left hand onlie in ballance.
 Take your Lunt in your right hand.
 Blow your Lunt.
 Cock your Lunt.
 Try your Lunt.
 Guard your pan; and bee readie.

The Ranges of Officers, from the lowest, to the highest.

ARMY. LANE. NO. 1. 1611.

THE lowest Range, and meanest Officer, is Lanspresado; the Leader of half a string; called a Middle-man, or Cap-tayn over four, the Corporalls Deputie.

Next is the Corporall. Hee is the Leader of a string, and Commander of a Squadre in their Watch and Centrie.

Next is the Sergeant; An Officer of great vse, for rectifying of ranks and strings, of necessarie hee should bee Skilfull.

Next should the Drummer bee at least the Drummer Major; whose Place is Gentile; hee should bee of experience, and a good Linguist; for redeeming of Prisoners; for intimation of Parties. His place of march is three ranks of pikes or Musquets preceeding.

Next is the Scriver, or the Clerk of the Band. Hee is no Souldiour; yet hee ought to bee learned in Martiall lawes; to instruct the souldiours. Hee receaveth pay from the Tresaurers; and delyvereth it, proportionable, to the Companie.

Next is the Chirurgion lyke no wayes, no souldiour; And the reason is, if hee were wounded, who should cure those of the Companie, hee holdeth his place of Courtesie.

Next is the Antsign, or Coulours bearer, The Romanes, as the Spaniards now holdeth him next the Captayn. Hee marcheth vpon the right hand of the pikes, commonlie two ranks preceeding him.

ding him. In Garnison hee ought to haue the most eminens place of Lodging, or in Quartering. And the reason is, It is the conveaning place. For therein is the Credit, and principalitie of the Companie.

Next is the Quarter-master of the Regiment, or Harbinger. Hee intimateth their way and passages; and where they set down; and to everie Companie their quarter and place. Hee dependeth vpon the Quarter-master Generall.

Next is the Provost Marshall. Hee hath the Custodie and Respect to Guiltie persons, and the Charge of the Execution. Hee dependeth vpon the Judge Marshall.

Next is the Lieuetenant, a Captayns conjunct; in whose absence hee occupieth his Vice, as the word it self beareth; hee bringeth vp the Rear, whyle the Captayn marcheth vpon the Van; and the Rear hath the second place. The reason whereof, is, if commanded right or left about the Rear, becommeth the Front.

Above all these, is the Captayn. His Charge is over a Company; commonlie consisting of one, two, or three hundred. Hee ought to know the dutie of the forsayds Officers, that accordinglie hee may command.

Next is the Sergeant Major, a principall Captayn, the Deliverer and Distributer of the Orders of the Regiment. Hee receaveth them from the Commander of his Brigado: And hee from the Major Generall, of his Brigado, (who commonlie is chosen out of the Majors of the Regiments;) And hee from the Lord Marshall of the Field.

Next is the Lieutenant Collonell. Hee surragateth the Vice and place of the Collonell, in his absence.

And above all these, is a Collonell. Hee is head, and hath Commandement of a Regiment; consisting of ten or fifteen Companies. And the eldelt is *Magister de Campo*.

Next is the Sergeant Major Generall. Hee is taken out of the Collonells, commonlie, at least once, hee ought to haue been on. Hee commandeth the Collonells, and rangeth the infanterie into *Battalia*. Hee is one of the Councell of Warre.

Next is the Collonell Generall, if there bett anie. Hee hath a generall

generall care of the Government of all the infanterie: But in a Armie, hee hath onlie commandement of a Brigado. Hee is ever one of the Councell of Warre.

Next is the Lieuetenant Generall of the Hors, or Generall thereof. For bee must have none aboue him, except the Generall of the Armie; one of the Councell of Warre. Hee hath his own Commissarie, and Quarter-master generall.

Next is the high Tresaurer of the Armie, vnder the Generall onlie. Hee is to have regard to the Auditor, Mustur-master, Commissarie, one of the Councell of Warre.

Next is the Master or Generall of the Ordinance. Hee is one of the Councell of Warre.

Next is the Lord Marshall. Hee distributeth the Generalls Commands to all the other Officers of the Armie. Hee ordereth their Lodgings, and encampings. Hee assigneth in Battell, to everie bodie his place. The Sergeant Major Generall, afterwards, accordinglie rangeth. The Infanterie into *Battalia*. Hee marcheth in the Vanguard.

Next is the Lieuetenant Generall of the Armie, younger Brother to the Generall. Hee ought to cause all the Generalls Commands, bee put in Execution, as absolutelie as himself: But speciallie in march. For thus hee doeth ease him. Some think vnnescessarie this Office, where there is a Lord Marshall.

Lastlie; Having no paralell is the Generall; Whose properties ought to bee Valiantlie to fight; of a resolute Mynd, and judgement, in all Recounters; to make a Surpryze, with good and foreseeing vnderstanding; to choose well a place of Advantage; to choose a proper place, for lodging, or fighting; to pass a River, or escape an evill passage: and, when need is, to make great Expedition: To make fass or true Allarums; or assaulteth to the Enemie, in place and tyme convenient: To bee Skilfull in Engynes; and paynfull in all: To bee liberall; and to reward Valiant Acts of Arms; and mercifull to Forfaitures. And in a word; Hee ought to know everie one his Ductis; and should excell in Virtue, Wisdom, Diligence, and Experience.

There

There is a second Range, and haue
another Dependance; And most of
them wayt vpon the Horsmen ; And
take their Direction from the
LORD MARSHALL.

THE First and Lowest, is Gun-Master, an inferior Officer;
vnder the Master of the Ordinance. And hee is called a
Constable.

Next, is the Trench-Master. Hee hath respect to Fortifi-
cations.

Next, is the Wagon-master. Hee hath charge of Bag and
Baggage. Hee is called *Master Impedimentorum*.

Next, is the Forrage-master. His charge is for Provision, to
the Hors. Hee dependeth more nearlie vpon the Lord Marshall.
Hee hath his Inferior Officers.

Next, is the Proveant-master. His charge is for Victualls to
the Armie. And hee hath his Quarter-master, and other Of-
ficers.

Next, is the Judge Marshall. Hee giveth Sentence vpon
Offenders.

Next, is the Scout-master. Hee maketh choose of places of
Danger; where, and how, to place them. Hee dependeth also
more directlie vpon the Lord Marshall.

Next, is the Lieutenant of the Ordinance. Hee dependeth
vpon the Master of the Ordinance. They haue thier Quarter-
master, and Inferior Officers.

The Last, and Greatest, is Mustar-master Generall: And is one
of the Councell of Warre.

These are the Functions and Members, of the totall and com-
pleat Bodie: Whose head the Generall, communicateth and dif-
fundeth his Orders, and Commandements, by the Lord Mar-
shall to them all, after this four-fold Division, or Distinstion.

Videlicet,

Videlicet, Of the Cavalrie, of the Infanterie, of the Artillerie, of the Victuall; Which is to say, The Commissarie Generall of the Hors, commeth and receaveth the Generall his Orders from the Marshall, and delyvereth them, to the Lieuetenant Generall of the Hors; And then to the Quarter-master Generall thereof; And from him to all the Quarter-masters, from everie Quarter.

And so the Sergeant Major Generall of everie Brigado commeth to the Marshall; and receaveth their Orders; which hee delyvereth to the Commander of that Brigado; and hee to the Sergeant Major of each Regiment; and then to all the Quarter-masters from everie Quarter. And so the Quarter-master Generall of the Artillerie, from the Marshall, to the Master of the Ordinance; And from them, to everie Quarter-master. And in lyke-manner, the Quarter-master Generall, of the Victuall, commeth to the Marshall, and receaveth their Orders; which hee delyvereth to the Proveant Master; And hee to the other Quarter-master from everie Quarter. Thus you see with what Facilitie, and what Celeritie the Diversitie, of one mans Commandements, is distributed and diffunded to the vniuersall Armeie.

And of these Ranges, the Armeie is perfected. For it is a Bodie; And these are the Members; and the more distinct, it is in their particular charges, the more compleat, the same is. This mayn bodie it self, is ingrossed of man and man, made vp of manie individuall persons. Which is done, if vpon march (which is a space vsuallie of three foot and half) beeing four, six, or ten, in Front; the Musquets of everie Companie preceeding the pikes of their own Band; they are commanded to halt. Then considering the intended deepnes, eyther of six, or ten, or twelue men, you cause them, that immediatelie followeth the foresayd deepnes, to march vp in Front, vpon the left hand of the first Division. And after this manner, all the pikes. And in lyke maner, after these the Musquets, still observing the left hand; making on Front; & on deepnes of all the Companie. And thus way of Companies, Regiments, and of Regiments Brigadoes, or Bodics; and of Brigadoes the vniuersall Bodie; which in broadnes hath

ness hath three speciall Divisions; to wit, The right and left hand wings; Where the best men ought to bee placed; and comonlie beginneth the Fight. And the thrid Division, is the Battell; or that which is the middle betwixt the two foresayd wings. The Greeks and Swisses as yet, thus in on Front had their Battell; But compacted verie closs together, and made vp of manie ranks; commonlie twentie-four in deepness; They were so closs, that hardlie they could bee broken. But now having the vse of other Arms, wee must keep the Distances alreadie mentioned. And there is a second Division; to wit, Of deepness, (speciallie vsed when the Armie is great and pondersous, the Field, strayt, and narrow; that it is not able to contayn so large a Front, as the Armie would extend to.) And thus it is into three bodies; The first is the Front, or Vanguard; The second is the Mayn Battell, or middle betwixt the Front, and the Rear: And the third, is the Rear, or Stall. And thus the Armie beeing placed, the first beeing beaten; the second may renew the Fight. And if both, the last may recover all; As manie examples can instance. And it is thought the best way of fighting is by Reserues; Yea, by Troupes, as to hazard all at once. The Romanes vsed this kynd of three-fold Battell. But that they so placed them; that the first within, the second and both within, the third might in order retire, if need was. And thus still to mayntayn; or rather, to renew the Fight. But their form and manner of retreat, now not in vse. An Armie may bee drawn vp after manie diverse forms, and figures, according to the exigencie of Tyme, Place, and new Inventions, and Prudencie of a Generall, as into a Triangular. And the form of an Half moon; or into both at one tyme, as the first point chargeth the Enemie; but composed of the weakest men, that they may the more easilie retire; whyle the two Angles advanceth; and becommeth two wings. And there-after the middle part shrinking, and the wings advancing; is then after the forme of an Half Moon. And that for circumdating the Enemie, as the Battell of Cannas was. And some tymes into the shape of a Diamond, for penetrating and pearcing within the Enemies Battell, into the figure of an Orb, for defending at all quarters; into a Wind-miln, and diverse others, for their severall reasons. But heere-in I spare summing

summing all vp in this, that an Armie is a Bodie, made vp of manie singular persons; whose head is the Captayn Generall, whose heart is good Order; whose lyf and welfare is in good Commanders; Whose Defence is in Hors-men; for without the same an Armie, is naked. The Soull of which Bodie is Cannon; and Powder, and the Sinews, and Nerves, that concatenateh altogether is Money.

Thus then I halt: Neyther hath it been my scope to vnder-take that which is onlie fitting for those of greatest Wisdome, and Experience in the perfect Draught of a compleet Armie. Onlie thus much I haue given to the young Souldiour, as a generall view of the reason, and the end of all the foresayd Exercises; To the effect, That hee who intendeth to bee a good Captayne, hee may clearlie perceave, that of necessitie hee must first bee expert in the practice of this Militarie Rudiment. For by the same great matters, haue been performed; and without the same all goeth to confusion; consequentlie, to ruin.

Most considerable observations, anent Fortification, both in Engines vse of Works, or Skill in Artiliarie; collected from the most expert; *who hath verified them by their practise.*

A Fort is made, that a little may resist a great force, or a few great number of men.

And Works from Engyne, are eyther simple or componed. The Simples are a Wall, a Rampate, a fals Bray within the Wall, a Counter-scarp, a Lyne, an Angle, a Circle, &c.

The Compounds, are eyther of some of these; as is Redout, an Half Moon, an Horn-work, a Sconce; or all of these, as is the Fortificationes of a Town.

That which proceedeth from Assault, is eyther from Approaches, or from Artiliarie. But the most furious, is by Artiliarie.

But first of Fortification, from Skill in Works; and then of Assault, by Artiliarie.

Before you build a Fort, you must obserue this Maxime, in four particulars. First, to haue a respect to the strength of the Enemie. Secondlie, That the Expence may bring Commoditie.

Thirdlie,

Thirdlie, That the travaill may bring Rest. Fourthlie, That the
tyme may bring Assurance.

Next; You must obserue the most Advantagious place of Si-
tuation: And there are six. The first is that of a Mountayn, when
the Fortification occupieth the Tope of the same. For it can not
bee commanded by anie Art. And it discerneth all round about
it, for to hinder Approaches. But it hath that incōmoditie; often
wanting Water, and good earth, and facilitie of Transportation.
The second is vpon a mountayn also. But the comming to it is by
the continuation of another mountayn. This hath a incommodi-
tie more as the first; Which maketh Approaches easie, for eleva-
ting a Mount vpon the same; and to haue an Command within
the place. The third also is vpon a Mountayn, where there is
many wayes comming to it, consequently, more incommodities.
The fourth is vpon a Marish watrie, or sea place; where the Ap-
proaches can not bee without drying the Marish. The fyft is
vpon a playn firm ground; which hath the Cōmodities of good
earth, and Water in the Ditch. A Fortification easie to bee made
within and without. But the incommodities great; For the Ap-
proaches are easie. The sixt and last, is, That is commanded by
some Mountayn, one or more. The Commodities few; The in-
commodities great.

And the third Observation, is, Betwixt the Assailers, and the
Assaulted in a fortified place. And that is (excepting accidents)
ten without, for one within, with proportionable provision.

Lastlie, You must obserue that the Assailers hath incommodi-
ties, that the assaulted hath not; First, Evill lodged in an Hut.
Secondlie, Discovered in their Approaches. Thirdlie, To cover
them aboue at the foot of the Breach. Fourtlie, To mount the
Ruin of the Breach. Fiftlie, To guard them from that which
is casten from aboue vpon them. Sixtlie, To fight barnished,
and hevilie armed.

And now, of Assaults by Artiliarie; which that you may the
better know, you must consider four things. First, The destruc-
tion of Cannon. Secondlie, The necessarie proportions there-
of. Thirdlie, The most effectuall shooting of Cannon. Fourth-
lie, You must vnderstand the proportion betwixt an Armie, and
Artiliarie.

And

And for the first of these; The most common Artiliarie shoo-
teth 35, and 45 pound.

The most vulgar length of a Cannon, is ten or twelue foot.

And secondlie anent the proportion. A Cannon of twelue foot
in length, is equall to 13, or 17.

The Charge is according to the value of the powder; com-
monlie the third of the weyght of the Ball, at least.

The port of a Cannon in a right lyne is 600 commune space;
a Culverine as much, and others less.

Distance of Batteries is 200, 300 space, at the furthest, for to
evite the hazard of Musquets.

The ordinarie force of a Cannon is (beeing 200 space di-
stant) to pearce of well digested earth fyue foot: but of new
builded ground, seaven foot; and of sand, ten foot.

A Cannon may shoot 80, or more shot a-day.

The force of a Cannon, is greatest from a low place to a high.

A Cannon is more effectuall, and maketh greater ruin; beeing
yon a Fort, with Angles, and Corners, as a simple Batterie, of
on Front. For thus they shoot athwart.

A thousand shot quicklie done, maketh greater ruin, with ten
piece of Cannon, as fifteen hundred shot with fyue Cannon.

A good Engynier should chieflie foresee necessarie repara-
tions, according to the ruin.

Lastlie, anent the proportion betwixt Armies and Cannon;
an Armie for a Siege, should haue twelue Cannon, three Culve-
rines, and some Bascards, for impeaching of fortes.

You may judge the greatness of an Armie by the number of
pieces and munition; they beeing the soule of an Armie.

As there is proportion betwixt an Armie, and that which su-
syneth them, so betwixt Artiliarie, powder, and ball.

A thousand men should haue on Cannon, an hundred balles,
and proportionable powder, and for the carriage thereof, an
hundred Hors: But this may change according to the advan-
tage of the place. For it is easier transporting by Water, as
by Land.

